



The

GARzette



The Official Newsletter of the Gwinnett Amateur Radio Society

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www.GARS.org



**GARS January Exhibition of the
Technical aspects of Amateur Radio
Held as the Gwinnett County
Fairgrounds**

**Don't forget to support our
advertisers at the back of the
GARzette.**

**GARS Meeting: Favorite Ham Radio and Related Websites
Tuesday September 9, 2022 at 7:00 PM**



President's Message

From the President...



I am looking forward to next month's annual "Show and Tell" program. I know a lot of you have or are actively building something for your ham radio endeavors. Come share whatever you have created with the group. Whether you have engineered and soldered a circuit board to fulfill a need,

or you have come up with a modification of some sort that makes your ham radio endeavors more productive, then please come and share.

We have a great group of volunteers! And to see that, just look at www.gars.org. There are the Officers and Committee Chair people, folks that organize and work parades, helpers for the annual Dog Show and Ham Fest activities ... and many more. All of these folks deserve our admiration and thanks. These folks volunteer their time and money never expecting or seeking praise. It's a good team to be on. Come join a cool devoted group of Hams.

Remember our Twenty-Five Year TechFest coming up on January 14, 2023. We can use a few more good volunteers. Tasks range from food preparation / delivery - to setup and takedown of tables and chairs.



If you would like to be part of the TechFest team, [Click Here](#) to go to the signup sheet and be apart of our team. I guarantee it will be a rewarding experience.



At the August General meeting, **Susan Swiderski, AF4FO** was awarded an Honorary Lifetime Membership based upon a nomination of merits throughout time in the GARS Club. [See more details elsewhere in this](#)

[issue of the Garzette.](#)

We have a need for someone to host / organize our annual GARS Holiday Party on December 3rd. We have an established caterer for food, so food planning and presentation should be straight forward. Setting a theme and acquiring table coverings accounts for pretty much the rest. If you would be willing to take this on, please contact me through <http://www.gars.org/gars/officers/>.

Ham Of The Year - Speaking of the Holiday Party in December, that is when and where we announce the GARS Ham Of The Year.

Nominations may be submitted by GARS Members about other GARS Members, for actions in which they have volunteered, served, and have given of their time and effort to our great Club.

Submit someone and a list of reasons why this GARS member deserves this award. The Officers, who are exempt from nominations by the way, will review the submitted nominations and select the GARS Ham of the Year for 2022.

To submit a nomination, please fill out the form at <http://www.gars.org/gars/hoty/> by **November 1st** for consideration.

73.

Joe Biddle, AD4PZ

Club President



GARS Repeaters and Other Communications

<u>2 Meter Repeaters</u> 147.075(+) MHz Tone 82.5 147.255(+) MHz Tone 107.2 <u>1.25 Meter Repeater</u> 224.580(-) MHz Tone 100.0, 1.6 MHz Offset <u>70 Cm Repeaters</u> 444.525(+) MHz Tone 82.5 442.100(+) MHz Tone 100 442.325(+) MHz Tone 100	<u>6 Meter Repeater</u> 53.110 (-1 MHz) No Tone (Offline for Maintenance) Other Resources: <u>APRS</u> 144.390 -- 1200 Baud W4GR <u>D-STAR</u> WD4STR 145.060 + (1.4 MHz) 440.550 + (5 MHz)	6M Currently down 147.075 Operational in Snellville 147.255 Operational in Snellville 224.580 Operational in Grayson 442.100 Operational at Goshen Springs 442.325 Operational in Buford 444.525 Operational in Snellville Link remote receivers being added
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Notable Web Links

Ham Radio Glossary: <https://noji.com/hamradio/glossary.php> a very comprehensive listing provided by Noji Ratzlaff KNØJL. On his site there is also a lot of information about getting started in ham radio.

Need Help – Let GARS Elmers answer your questions

Send an email to elmers@gars.org with the subject listing the area (like Antennas, Repeaters, Digital, DMR etc.) of your query to get to GARS Elmer volunteers.

The *GARzette* is the official monthly newsletter of the Gwinnett Amateur Radio Society, serving its members and other persons interested in the advancement of the Amateur Radio art.

Original articles, art, and photos are invited and encouraged. Previously copyrighted submissions cannot be accepted for reprinting unless permission from the appropriate publisher is provided in writing along with the information being submitted. If reprints are from publications allowing their unrestricted use, please include a copy of the printed permission contained in the publication.

If possible, bring your articles to the monthly meeting in Microsoft Word or rich text (.rtf) or text or HTML format or by e-mail to editor@gars.org. Artwork can be accepted in most any graphics format and can be submitted via e-mail to the same address. Alternate means of submittal can be arranged when necessary.

In keeping with the Amateur Radio spirit, permission is hereby granted for the reproduction of The *GARzette* articles by other Amateur Radio club newsletters provided that proper credit is given to the individual author and *The GARzette*.

The GARzette is published each month with the assistance of Karen KI4HPP and Kyle W4KDA who print copies for distribution at meetings, etc. and Dave Bruse, W4DTR, who distributes the newsletter electronically.

Deadline for submissions is the 28th of each month for inclusion in the following month's issue.

For additional information view our Website at: <http://www.gars.org>

Newsletter Email: editor@gars.org Editor: Bob Hoffmann, K4CQO Assistant Editor: Bill Eggers, WB2RIS

GARS HELP WANTED

Speakers Needed for GARS Workshop Presentations, 3rd Tuesday of the month – Email workshop@gars.org to volunteer. [PS— Articles to publish in the *GARzette*, either written by GARS members or published elsewhere, are always welcome. —Ed.]

GARS Meetings & Workshops

GARS Meetings and Workshops are held in-person at the EAA 690 Hangar, 690 Airport Rd, Lawrenceville, GA 30046.

Meetings and Workshops are **OPEN** to all, feel free to share your invite with others.

Zoom login info will be posted to <http://www.gars.org> prior to the meeting.

When events are available on Zoom

- Workshops and Meetings will be **recorded**. By participating you consent to being **recorded**.
- Please change your display name to Your **FirstName Call Sign**, e.g. **Hiram W1AW**
- [How to change Your Display Name in Zoom](#)
- Please stay muted until ready to speak. Your space bar works like a PTT for un-muting
- To be fair to everyone, there will be a three minute limit for each person during Q & A
- You may ask questions in chat; **please stay on topic while using chat**.

GARS Meetings Schedule (second Tuesday @ 7:00 PM): (these are the presentations)

- September 13, 2022 - Favorite Ham Radio and Related Websites
- October 11, 2022 - GARS Show-n-Tell - The Hand-on Workshop
- November 8, 2022 – Pi-Star DMR Hot Spot - Mark Prichard KN2TOD
- December - GARS Holiday Party
- January 10, 2023 - **OPEN**
- February 14, 2023 - **OPEN**

Workshop Schedule (third Tuesday @ 7:00 PM): (these are the Hand-on Workshops)

- September 20, 2022 - Favorite Ham Radio and Related Websites
- October 18, 2022 - GARS Show-n-Tell - The Hand-on Workshop
- November 15, 2022 – Pi-Star DMR Hot Spot - Mark Prichard KN2TOD
- December - GARS Holiday Party
- January 17, 2023 - **OPEN**
- February 21, 2023 - **OPEN**

GARS Meeting – September 9, 2022

Favorite Ham Radio and Related Websites and Apps

This has become an Annual GARS Event where members share their favorite ham radio related websites and apps.

GARS Workshop – September 16, 2022

Favorite Ham Radio and Related Websites and Apps

For the Workshop we will go over any configuration need for the suggested websites and Apps... Examples would be how to sign up for Log Book of the World, or create your QRZ bio.

This will be an in-person Workshop at the EAA 690 Hangar.

GARS Happenings

20 Years ago in the September 2002 GARzette:

- Bill Carter, KG4FXG, wrote a camping article equating camping to a Simulated Emergency Test
- GARS helped in both the yearly Dog Show and a Buford 5K Run
- Stan Edwards, WA4DYD, excellent article describing the relationship of Gwinnett ARES with GARS

You can always browse the GARzette archive at <http://www.gars.org/newsletters> and go directly to the 2002 GARzette by clicking on the image. 73, Bob, K4CQO, GARzette Editor



Health and Wellbeing – Sandy Jackson, KJ4DRO

Look for this resource on [gars.org](http://www.gars.org) and use it as a means to convey information about a GARS family member or Silent Key notification.

Net Managers Corner

Monday Night 2 Meter “Want, Swap, Sell, and Information Net”

GARS NEEDS MEMBERS TO SERVE AS NET CONTROL STATIONS!

GARS is a great Amateur Radio service club with the membership and awards to prove it. Our club is very busy and active, and we use the Monday night net to get timely information out to our members. Weekly participation is needed to make our net function well. There is only a small group of very dedicated people who make the net happen each week, and we need more members to volunteer to serve as Net Control Stations (NCS) on a rotating basis.

Out of almost 300 members, there are only seven operators who serve as the NCS for the GARS net every Monday night. In no particular order, they are:

Don – KW4AL	Ray – N4GYN	Bill – WG9NUW	David – KA4KKF
Glen – W3WWT	Russell – AB4QQ	Chuck – KK4TKJ	Charlie – WS4TOT

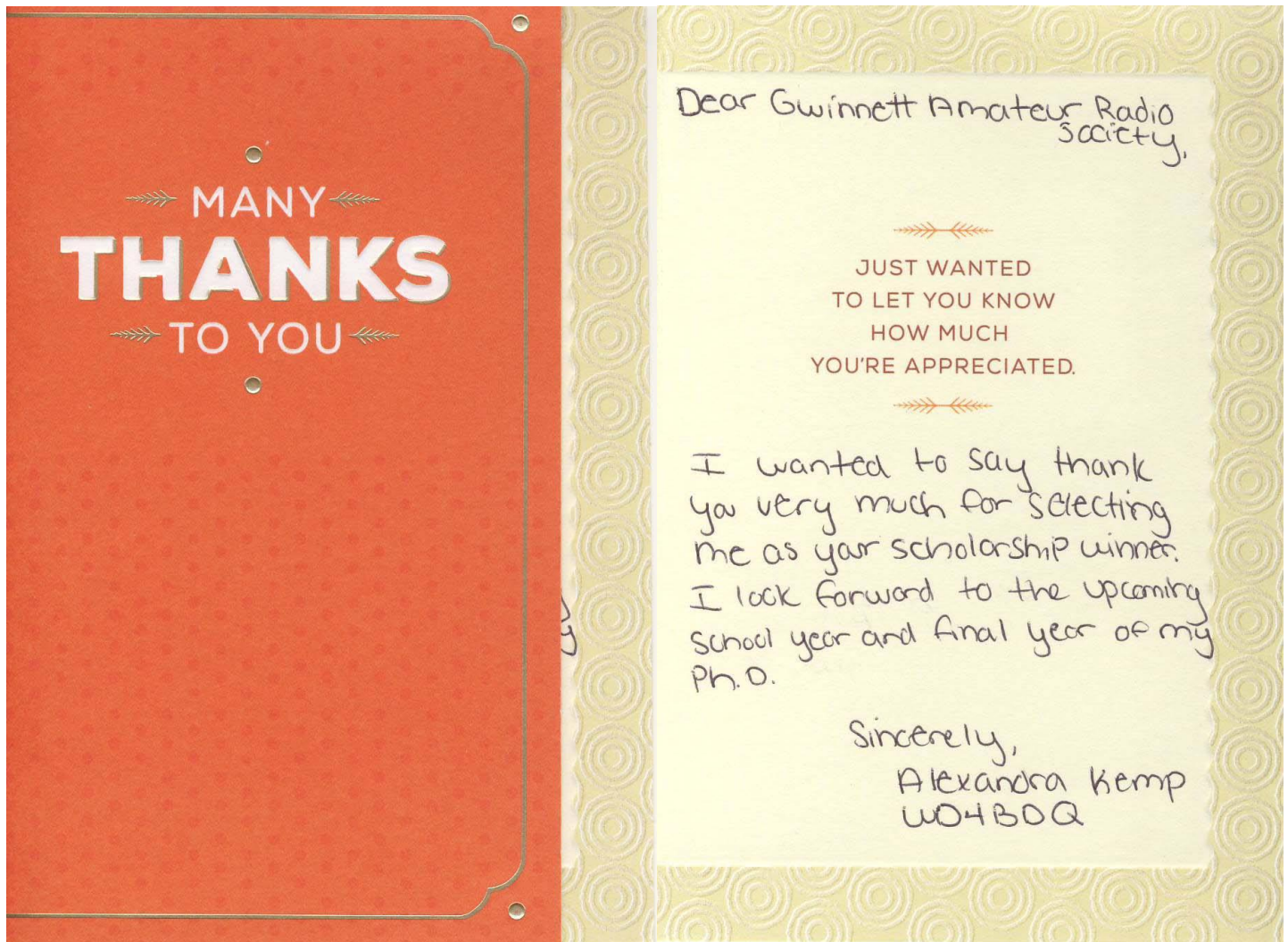
As GARS Net Manager (Chuck KK4TKJ), I would like to have more volunteers to fill NCS positions. I do plan and post the schedule months in advance. Any conditions will be accommodated that you as a rotating NCS need to place on the scheduling of your duties. If your plans change, I can make adjustments for the schedule to work, and I will make those changes happen as soon as I am notified of a problem. As Net Manager, I also send out reminders each week to let the NCS scheduled know he or she is NCS for the next Monday night net. In short, serving as a rotating NCS is a small duty but a great contribution to the club. The “Want, Swap, Sell Information Net” begins promptly at 19:30 every Monday night and runs about 30 minutes. As a scheduled NCS, you will request the assistance of a volunteer alternate NCS each time you have Net Control. Your simple duties will be to tune in to the GARS repeater, read the script, take a few notes and forward the information to me for record keeping.

Please lend a hand and contact me (Chuck) at KK4TKJ@arrrl.net. Sign up to help support the effort that makes GARS the great club that it is. 73 and see you on the Nets!



GARS Scholarship Recipient

Alexandra Kemp received a \$1,000 scholarship that is sponsored by GARS and administered by ARRL.



Alexandra “Alex” Kemp (WD4BDQ) is a communications professional in Atlanta, Georgia. Alex has been in the healthcare field for six years and is currently working on her Master of Science degree in Aeronautics at Embry-Riddle Aeronautical University. She will then pursue a PhD in Human Factors Psychology to study mental health in extreme and remote environments for future space travel. Over the past five years, Alex has extensively volunteered for various space organizations, conferences, and events. She has a passion for STEM education and public outreach. Aside from work, Alex is a world traveler having traveled to 25 countries and recently to Australia and New Zealand. She is also a professionally trained opera singer, in which she performs around the Atlanta and Los Angeles areas.

GA QSO Results

GARS came in 11th overall against other clubs during the GA QSO contest that was held in July. The complete 2022 Georgia QSO Party results are published on the GQP webpage.
<https://gagsoparty.com/ResultsPage.html>

	Club_Name	Entries	Score
1	NORTH_FULTON_AMATEUR_RADIO_LEAGUE	40	1186267
2	FLORIDA_CONTEST_GROUP	17	362210
3	TENNESSEE_CONTEST_GROUP	19	286664
4	AMATEUR_RADIO_CLUB_OF_AUGUSTA	1	206806
5	COLUMBUS_(GA)_AMATEUR_RADIO_CLUB	2	188764
6	SOCIETY_OF_MIDWEST_CONTESTERS	11	156489
7	FRANKFORD_RADIO_CLUB	8	149929
8	POTOMAC_VALLEY_RADIO_CLUB	14	125771
9	SLOVAK_CONTEST_GROUP	1	105435
10	CONTEST_CLUB_ONTARIO	12	86377
11	GWINNETT_AMATEUR_RADIO_SOCIETY	6	79443

The GARS members that provided their scores for GARS totals:

Call	Category	Mode	Power	Transmitters	CW QSOs	CW Mults	SSB QSOs	SSB Mults	QSO Points	Final Score
David Adcock, KA4KKF	SINGLE-OP	SSB	LOW	ONE	0	0	5	4	0	20
Laurence Andrus, KB4LWT	SINGLE-OP	SSB	LOW	ONE	0	0	104	1	104	104
Brian Page, N4TRB	SINGLE-OP	SSB	QRP	ONE	0	0	34	2	34	68
Mike Weathers, ND4V	SINGLE-OP	MIXED	LOW	ONE	351	44	5	1	707	31815
Paul Kelley, W4KLY	SINGLE-OP	CW	LOW	ONE	402	45	0	0	804	36180
Joel Levine, WA4HNL	SINGLE-OP	SSB	LOW	ONE	0	0	268	42	268	11256

Honorary Lifetime Membership Awarded

It has been a few years since we have awarded a lifetime membership to anyone in the club, so this particular award is very long overdue. We awarded this one at our August General meeting.

The Honorary Lifetime Membership is awarded to **Susan Swiderski, AF4FO**

Some of Susan's merits considered are outlined below:

- Volunteer Examiner
- Net Control and Net Control Chair
- Apparel Chair
- Volunteered & participated in many GARS Field Day activities.
- Past GARS President
- Volunteer Examiner
- Volunteered & participated in many GARS Field Day activities. This includes many Hours at HamFests promoting this club.
- Awarded the GARS Ham of the Year HOTY 1998
- Volunteer for years with the Ham station at SciTrek representing GARS
- Created an award that honors outstanding young hams at the local level. The GEORGIA SECTION YOUTH AWARD WAS BORN
- ARRL Georgia Section Manager (Several Years)
- ARRL Affiliated Club Coordinator for Georgia
- And a Published Author
- ...and more



At the August GARS General meeting, the award committee unanimously voted to send this proposal to the membership for a final vote, where it was voted on and passed very easily.

On behalf of the GARS Membership, I would like to thank Susan so very much for her many years of contributions to our club and the Ham Radio Community.

We wish her all the best! 73's & 88's.

By Joe Biddle, AD4PZ

Hallicrafters HT-30 and SX-100 - V3

Vintage Amateur Radio

de Bill Shadid, W9MXQ



Always a mainstay in the ham radio business into the 1970's, Hallicrafters was certainly a market leader in a lot of areas. They were very close in timing to Collins Radio Company in the move to Single Sideband (SSB) equipment in the 1950's. In fact, they may have actually preceded Collins in an initial move to more compact radios with the 1954 introduction of their first tabletop SSB station – the HT-30 Transmitter and the short lived SX-96 Receiver. (The SX-96 Receiver was soon to be replaced with the now iconic SX-100.) Hallicrafters did incredible things in the 1950's with the introduction of the very first hybrid SSB Transceiver, the FPM-200¹. While introduced after the industry leading Collins KWM-1, the FPM-200 included full HF coverage (80-10 meters) while the all vacuum tube KWM-1 included only 20, 15, and 10 meters. Hallicrafters was, as they said at the time, "The Radio Man's Radio²."



Hallicrafters HT-30 HF SSB/CW/AM Transmitter



Hallicrafters SX-100 HF SSB/CW/AM Receiver

Shown above is the Transmitter/Receiver pair most well known in the Hallicrafters line at the time. Shown below is the initial receiver that was introduced with the line in 1954, the Hallicrafters SX-96. The SX-96 was a fine receiver but not up to the performance levels of its successor, the SX-100. Perhaps Hallicrafters marketing was ready to go to market with the revolutionary HT-30 Transmitter but that the SX-100 Receiver was just not quite out of the laboratory and ready for production. The reasoning is lost in history.



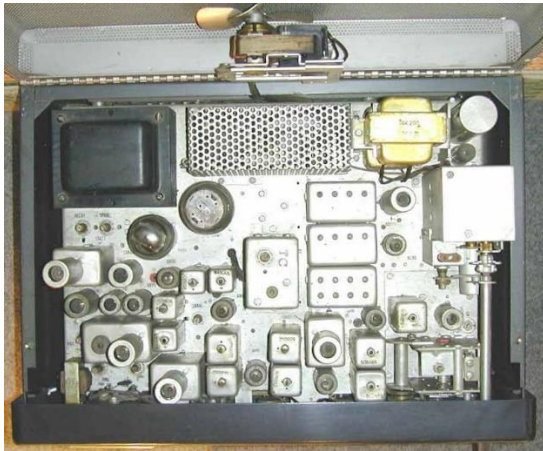
Hallicrafters HT-30 HF SSB/CW/AM Transmitter



Hallicrafters SX-96 HF SSB/CW/AM Receiver

You can clearly see, in the above two station offerings, that the SX-96 was not an appearance match for the HT-30. Both the SX-96 and the SX-100 have been a part of the W9MXQ collection of Hallicrafters radios. Today, the SX-100 remains, and the SX-96 resides with good friend, Bill, AC9JV. While not a worthy partner in the SSB market with the HT-30, the SX-96 is a very fine receiver. In fact, the SX-96 mentioned here was owned initially by a now silent key friend in Quincy, Illinois. He had attempted to add the features to make the SX-96 perform like the SX-100. He later removed that modification, but

to this day that SX-96 has a place in its chassis where an extra i-f tube and circuitry was added. The necessary opening for the tube socket was neatly done by my Quincy friend who was a fine technician. Here is a look inside the HT-30 Transmitter (left) and the SX-100 Receiver.



Top Inside View – HT-30 Transmitter
(Front at Bottom of Picture)



Top Inside View – SX-100 Receiver
(Front at Bottom of Picture)

The small, shielded cabinet at the top of the HT-30 picture is the enclosure for the two 6146 final amplifier tubes. The receiver was identical in overall front panel dimensions but not as deep – front to back. Shipping Weight of the two units was 34-1/2 pounds for the receiver and 51 pounds for the transmitter. The heavier power transformer, the added weight of the larger cabinet, and the addition of the synchronous motor fan in the transmitter made for the increased weight. The fan cooled the rather tightly enclosed final amplifier tubes. The enclosure similarly located in the SX-100 Receiver enclosed the Notch Filter circuitry. (That Notch Filter feature was not present in the SX-96 Receiver.)

Frequency coverage of the HT-30/SX-96 or the final HT-30/SX-100 package was somewhat different than the competition. The SX-96 and SX-100 Receivers covered the HF spectrum from 0.538 to 34.000 MHz. The HT-30 Transmitter covered the entire 80, 40, 20, and 10-meter bands – with no coverage provided for the 15-meter band. At the time, the 15-meter ham band had not been officially released for amateur use. Some manufacturers included it and some – like Hallicrafters – did not. Hallicrafters used a frequency quadrupling circuit to allow coverage of the entire 10-meter band with a single range VFO tuning range.

RF power in the HT-30 was certainly less than hams today would expect. The two 6146 amplifier tubes in the PA system provided an output power of just 35 watts – with a rated input of about 70 watts. Hallicrafters did not provide the expected 180 to 200 watts input in a transmitter until the later advent of the HT-44 Transmitter about ten years later. Even the much-touted HT-32 and HT-37 transmitters had an input power of only 144 watts that provided about 70 watts of output.

For these articles we do not generally get into deep technical discussions but the differences in the SX-96 and the SX-100³ are substantial. Just the added tubes in the SX-100 over the SX-96 (14 vs 12) suggests circuitry differences (because front end and audio circuits are little different between the two radios. The addition of an i-f stage, a complete notch filter system, and antenna trim features made for better performance in the more evolved SX-100 receiver.

The HT-30 Transmitter was the first of several Hallicrafters Crystal Lattice Filter SSB Generation Transmitters that included the HT-30, the HT-32, the HT-32A, the HT-32B, and the HT-46. (The popular HT-37 and HT-44 Transmitters utilized Phasing SSB Generation that Hallicrafters perfected to an artform, in my opinion⁴.)

No mention of the HT-30 and SX-100 station would be complete without a mention of the linear amplifier that was part of the system. To compliment the HT-30 power amplifier Hallicrafters designed and

introduced the HT-31 Linear Amplifier. True to its boatanchor heritage, the HT-31 weighs in at 92 pounds as it sits on the operating table. That is a lot of bulk (20" wide x 12-1/4" high x 17-1/4" deep) for an amplifier with a rated input power of just 510 watts. See the picture – on the left, below. The amplifier provides respectable power for the HT-30 station with a maximum output of 330 watts SSB/CW. Required driving from the exciter⁶ (HT-30 or any other transmitter) ranges from 8.5 watts at 80 meters to 20-25 watts at 10 meters. The amplifier used two 811A Triodes in the amplifier circuitry and a pair of 866A Mercury Vapor Rectifiers in the power supply. The HT-31 Linear Amplifier was not grounded-grid as we are used to seeing today. Instead, it was grid-driven which explains the very low drive requirement from the exciter.



Hallicrafters HT-31 Linear Amplifier⁵



Hallicrafters SR-500 Console⁸

Above and to the right is a rather special product from Hallicrafters from the mid to late 1950's that was called the SR-500 Console⁷. Hallicrafters incorporated the HT-30, the SX-100, and the HT-31 into an assembly that also included interconnection wiring and other switching and accessories. This idea appeared again later with the HT-32 Transmitter, the SX-101 Receiver, and the HT-33 Linear Amplifier. In keeping with its higher power input, this assembly was called the SR-1000 Console.

Today it is easy to find the SX-100 Receiver but a bit harder to find the SX-96 Receiver because not many were made. However, good SX-100 Receivers, while plentiful, are in demand. Even though they are a lot of them around, good ones are expensive. This is a good example of rarity not necessarily determining value in today's market.

The HT-30 Transmitter is a bit rare but does appear from time to time. The HT-31 Linear Amplifier is extremely rare, and the SR-500 Console is almost, as we collectors say, "unobtainium."

Most of my articles on radios that you have read are written from my own experience with only a few examples otherwise – which are always identified. The article on the HT-30 is one of those products that I have never owned. However, my collection currently includes an excellent SX-100 Receiver, has included the SX-96 Receiver mentioned herein, and I have had access to an HT-31 Amplifier in the past. I regret not having that experience with the HT-30 Transmitter. However, good friend and fellow collector, Pat Volkmann, W9JI, owned an HT-30 early in his ham radio career. Here is a short story, written by Pat, of his experience with the transmitter. And I quote.

"In the summer of 1973, I was 16 and had been a ham for about a year. I had just passed my General exam and was looking for some better equipment, even though I had very little money. My main rig was a Heathkit HW-16 that I had purchased with the proceeds of my part time jobs. The transmitter was crystal controlled and the receiver was so-so. Band coverage was limited to CW on 80, 40 and 15 meters. I wanted something with a VFO that covered all the bands.

A fellow member of the Wisconsin Valley Radio Association in Wausau, Wisconsin, had some equipment for sale. I didn't know much of anything about the radios, but they met my criteria – VFO controlled transmitter and within my budget (cheap!). Ron Dickman K9EYA (now KT9W) was the owner of an RME 4530A⁹ receiver and a Hallicrafters HT-30 transmitter. A deal was made, and the radios moved to my shack.

With my newly issued General class license, I made my first ever sideband QSO using the HT-30 on August 31, 1973, when I checked into the Wisconsin Sideband Net as WB9JIC.

This was real radio equipment! The Hallicrafters HT-30 was a solidly built, heavy transmitter, weighing in at just over 50 pounds. Power output was about 30 watts from a pair of 6146 finals. The HT-30 covered all the HF pre-WARC bands except for 15 meters. The VFO was accurate and stable and was much nicer to use than the rock-bound Novice transmitters I had started with.

During the 1970's HF propagation was extremely good. The HT-30's modest power output was able to regularly work DX on 20 and 10 meters.

I don't know how many hours I put on the radio, but it was on pretty much any time I was at home. Fortunately, there was never any problem. The HT-30 was a pretty complicated device and I expect most repairs would have been beyond me. I used this pair for the next two years, until I left home for a stint in the US Air Force. At that time, I sold them to a friend who was interested in getting his ham license. I don't know where they ended up but hopefully, they are still glowing today in someone's shack.¹⁰

Pat further comment on something that we both share regret over – the fact that neither of us too pictures of our equipment in those early days in ham radio.

I appreciate that you read my articles. Remember that I am open to questions and comments anytime at my email address, W9MXQ@TWC.com.

A special note of thanks to my proofreader, Bob Bailey, W9DYQ.

Credits and Comments:

¹ Subject of a future article, the reference to the “hybrid” FPM-200 references its solid-state design except for the final amplifier and power supply regulator tubes.

² Reference Hallicrafters' advertising copy from the 1950's. Maybe a bit sexist but this was the 1950's.

³ The SX-100 in the W9MXQ collection is a Mark 1B model – and comparisons are to this model.

⁴ It is worth noting that all of Hallicrafters' SSB Transceivers utilized Crystal Lattice Filter SSB Generation.

⁵ The Hallicrafters HT-31 picture is from Hallicrafters publication 94X1403.

⁶ The term “exciter” is not so much used today (in ham radio) but it refers to a low power RF generator used to drive (or “excite”) an amplifier. Research will show many such combinations such as the rather low power HT-30 Exciter used to drive the likes of an HT-31 Linear Amplifier.

⁷ The SR-500 Console uses a prefix (“SR”) later used by Hallicrafters for Transceivers. This SR-500 console is not to be confused with the Hallicrafters SR-500 “Tornado,” 80, 40 and 20-meter transceiver that dates from 1964 – many years after the short-lived SR-500 Console. The SR-500 Console referenced this product as the HT-30, SX-100, and HT-31 mounted in a single, floor mounted cabinet.

⁸ The SR-500 Station Console shown here is the property of N9CQX.

⁹ The RME 4350A Receiver was a ham band only (160-10 meters) product of Radio Manufacturing Engineers of Peoria, Illinois. RME, as it was called has a very interesting history that will be the subject of a future article. I was once the proud owner of an RME-4350A as well as several other RME models.

¹⁰ Patrick (Pat) Volkmann, W9JI, frequently writes articles for the Ozaukee Radio Club. While, like this author, Pat has respect for many pre- and post-WWII amateur radio brands, he seems to look with special favor on vintage Collins Radio Equipment. I am proud to call Pat a friend and co-conspirator in this hobby!

W9MXQ



GARS Membership

New Members List in August

... till next month ...

New Members: 0

**Total Members as of
September 1, 2022
359**

Join GARS members for our weekly
breakfast gathering at
7:30 AM most Saturdays
Now at
Cracker Barrel Restaurant
75 Celebration Dr.
Suwanee, GA 30024

Birthdays in September

Karen Albritton (KI4HPP)
Mary Bachner (KE4MFZ)
Sherryl Bailey (N3MIU)
Chris Bailey (KQ4AZV)
Larry Brinson (KO4IZU)
Jackson Britt (KM4PTV)
Richard Canova (KN4CGJ)
Lynn Crowley (KJ4RTE)
Ben Cullinan (KN4ZEX)
Michael Curd (KO4TN)
Pierre Decatrel (WB1EZK)
Russell Dickerson (KN4HAE)
James Drumm (N2FOF)
Roger Gibson (WB4T)
Fred Hoefler (W3TLC)
Richard Kitz (KM4SWL)
Alex Kowalchuk (AK4AM)
Roinell Lewis (K4RNL)
Maria Lewis
Cal Ludwick (KM4VDA)
John Mackay (KO4VIY)
Charles McElhannon (KM4QVI)
Chris Ritchey (KQ4CCF)
Butch Seibert (N4EFX)
Donald Stewart (KW4AL)
John Stockinger (KC4RFK)
Richard Waigand (K4KME)
Carter Wood (AG4LK)

GARS MEMBERSHIP

Your current GARS membership status is shown in the monthly newsletter e-mail towards the bottom of the message. To become a GARS member, or to renew your GARS membership, please visit our website – <http://www.gars.org>. To make changes to your GARS membership (moved, new e-mail address, new phone number, etc.), please e-mail your changes to the Membership Committee - membership@gars.org.

Membership Chair: Karen Albritton, KI4HPP

Committee Members: Dave Bruse, W4DTR

ARRL MEMBERSHIP

To update your ARRL membership information, please visit their website - <http://www.arrl.org>.

MAINTAIN YOUR LICENSE

You can update your Amateur Radio license information with the FCC at their website for free - <https://www.fcc.gov/wireless/universal-licensing-system>. License renewal is subject to the \$35 FCC fee.



Donating to GARS

Your GARS donation can be used for a certain purpose by donating to one of these funds:

- GARS SK Memorial Fund for Education (to remember and honor Silent Keys);
- GARS Scholarship Fund (Administered by the ARRL for awarding scholarships);
- GARS General Fund (any club purpose).

GARS has joined these rewards programs (a portion of every purchase you make through these merchants may be donated to GARS):

- Amazon Smiles;
- Kroger Community Rewards program.

For more information on how to sign up for these rewards programs, or to donate to GARS, visit

<http://gars.org/gars/donations-to-the-club>

GARS on Social Media



Discord Request:

<http://gars.org/discord>



Groups.io:

<http://gars.org/groups.io>



Visit GARS on Facebook:

<http://gars.org/facebook>



Follow GARS on Twitter:

<http://gars.org/twitter>



Join GARS on YouTube:

<http://gars.org/youtube>

GARS Mail Address:

GARS
P.O. Box 492531
Lawrenceville, GA 30049

Officers



Joe Biddle, President AD4PZ



Jamie Burns, Vice President KX4HA



Bill Hawkins, Secretary WR1TR



Pam Meridy, Treasurer WB1AKQ



Kevin Scott, Program Manager K4GTR

Managers and Committee Chairs



Karen Albritton, Membership Chair KI4HPP



Dave Bruse, VE Team Leader W4DTR



David Adcock, Webmaster, Field Day Chair, TechFest Chair KA4KKF



Ralph Pickwick, Apparel Manager and Education Chair KJ4CNC



Bob Hoffmann, GARzette Editor K4CQO



Eddie Foust, Repeater Chair WD4JEM



Mike Weathers, WAS / DXCC QSL Card Checker and Historian ND4V



Chuck McCord, Net Manager KK4TKJ



Steve Back, Technical / RFI Advisor WB2OGY



Kyle Albritton, Multimedia Chair W4KDA



Don Stewart, Elmer Manager KW4AL



Sandy Jackson, Health and Wellbeing KJ4DRO

Open Winter Field Day Chair

Open Georgia QSO Chair

Open Workshop Leader

Directors and Trustees



John Davis, WB4QDX



Rick Cobb, N4YYY



Kyle Albritton, W4KDA



Bill Cherepy, WB4WTN W4GR Trustee



GARS Meeting Minutes

Gwinnett Amateur Radio Society – MEETING MINUTES 8/9/2022

In person and online meeting. 36 in attendance in person.

President Joe Biddle (AD4PZ) Opened the meeting at 7:15 p.m. and closed the meeting at approximately 8:15 p.m.

New hams and visitors: Joe (AD4PZ) First time visitors recognized New hams and upgrades recognized. Several Ham-Cram grads were included.

Treasurer's Report: Joe (AD4PZ)

- Current report not available

Membership: Joe (AD4PZ)

- Number not available

Programs: Kevin (K4GTR)

- September - Favorite ham related websites part deux
- October – show and tell – More people are needed to sign up.
- November – Pi-Star DMR Hot Spot – Mark Prichard KN2TOD
- December – GARS Holiday Party
- Anyone with an interesting program idea, contact Kevin.

Workshop: Dallas (N4DDM)

- Workshops are a mirror of the monthly program.

Repeaters: David (KA4KKF)

- 147.075 was moved to Tribble Mill and is now higher by 50 ft.
- It is currently running at 45 watts.
- Will be moved back to Snellville and back to full power when parts for the linked receivers are received and installed.

Techfest: David (KA4KKF)

- David (KA4KKF) is our new chair.
- This is our 25th year
- Techfest will be Jan 14, 2023 at the Gwinnett Fairgrounds.
- We have a full schedule and need volunteers for setup and cleanup (7:30 a.m. to 5:00 p.m.)
- There will be door prizes by raffle
- Parking and food are free.
- Food and drinks will be provided, with the chili cookoff contributing.
- There is a form on techfest.info for anyone interested in presenting or exhibiting.

Other:

- Joe recognized Susan Swiderski (AF4FO) for her many years of service to the club, and presented her with a lifetime membership. A committee having been formed for the special award, and chaired by Earl, Earl presented an overview of her participation in the club and community over the years, Susan has been one of the most active volunteers in GARS. She has been a VE, club president, and ARRL affiliated club coordinator, and the many hours she has contributed are greatly appreciated. Susan was quite surprised by the honor.
- Steve (WB2OGY) announced that the 3rd weekend in October is the scouting Jamborie On The Air. They will set up at the VFW in downtown Lawrenceville. This is an opportunity to introduce ham radio to young people.

Program: Dallas (N4DDN) presented on building a four-element quad antenna.

Minutes prepared by club secretary Bill Hawkins (WR1TR)

Workshop Minutes - July 19, 2022

Number in Attendance: 13

Workshop Topic: How to build a 4-element, 2m, Cubical Quad Antenna

Presenter: Dallas N4DDM

Brief Summary: Dallas went over is building techniques to cut the fiberglass spreaders outside under a stream of water so the fiberglass dust was washed away before it had a chance to get air borne. The same water technique was used to file the edges of the spreaders so they were easy to push through the boom.

Also discussed was how to free hand the drilling of the holes to achieve perpendicular alignment and going over where the items were purchase to build the antenna.



Events – GARS and others

ARRL CONTESTING INFO

From ARRL Contest Calendar
> For more information click the links <

2022	2023	January
1	1	Straight Key Night
1	7	Kid's Day
8-9	7-8	RTTY Roundup
15-17	21-23	January VHF Contest
		February
14-18	13-17	School Club Roundup
19-20	18-19	International DX – CW
		March
5-6	4-5	DX Contest -- SSB
		April
10	16	Rookie Roundup – Phone
		May
		No planned contests
		June
4-5	3-4	International Digital Contest
11-13	10-12	June VHF
18	17	Kid's Day
15-26	24-25	Field Day
		July
9-10	8-9	IARU HF World Championship
		August
6-7	5-6	222 MHz and Up Distance Contest
21-22	19-20	10 GHz & Up – Round 1
21	20	Rookie Roundup – RTTY
		September
10-12	9-11	September VHF
17-18	16-17	EME - 2.3 GHz & Up – Round 2
17-18	TBA	10 GHz & Up – Wknd 1
		October
15-16	TBA	EME - 50 to 1296 MHz – Wknd 2
17-21	16-20	School Club Roundup
		November
5-7	4-6	Nov. Sweepstakes - CW
12-13	TBA	EME - 50 to 1296 MHz
19-21	18-20	Nov. Sweepstakes - Phone
		December
2-4	1-3	160 Meter
10-11	9-10	10 Meter
18	17	Rookie Roundup-CW

For more information:
<http://www.arrl.org/contest-calendar>

HAMFEST CALENDAR

[Please confirm the status of a Hamfest before making plans to attend]

09/10/2022 - Gadsden Amateur Radio Hamfest

Location: Attalla, AL

Type: ARRL Hamfest

Sponsor: Gadsden Amateur Radio Club

09/10/2022 - Prater's Mill Swapfest

Location: Dalton, GA

Type: ARRL Hamfest

Sponsor: Dalton Amateur Radio Club

Website: <https://www.facebook.com/groups/499173303579789/>

10/07/2022 - 10/08/2022 Melbourne Hamfest, ARRL Florida State Convention

Location: Melbourne, FL

Type: ARRL Convention

Sponsor: Platinum Coast Amateur Radio Society(PCARS)

Website: <http://pcars.org>

10/15/2022 - 2nd Annual Manatee Amateur Radio Club Swapfest

Location: Bradenton, FL

Type: ARRL Hamfest

Sponsor: Manatee Amateur Radio Club, Inc.

Website: <https://www.manatee-arc.org/>

10/15/2022 - Annual North Okaloosa Amateur Radio Club Hamfest

Location: Crestview, FL

Type: ARRL Hamfest

Sponsor: NOARC returns for yet another great show!

Website: <https://w4aaz.org/noarc-hamfest/>

10/15/2022 - Flamingo Net Flea at U. of Miami

Location: Coral Gables, FL

Type: ARRL Hamfest

Sponsor: Flamingo Net ARC

Website: <http://www.FlamingoNet.8m.net>

10/22/2022 - Deep South Amateur Radio Club Hamfest

Location: Chickasaw, AL

Type: non-ARRL Hamfest

Sponsor: ARRL

10/22/2022 - Wiregrass ARC - Fall Tailgate

Location: Headland, AL

Type: ARRL Hamfest

Sponsor: Wiregrass ARC

Website: <http://w4dhn.org>

11/05/2022 - Bahia Shriner's Tailgate

Location: Apopka, FL

Type: ARRL Hamfest

Sponsor: Bahia Shrine Radio Unit

11/05/2022 - SERC Hamfest

Location: Sarasota, FL

Type: ARRL Hamfest

Sponsor: Sarasota Emergency Radio Club

Website: <http://n4ser.org>

For more information: <http://www.arrl.org/hamfests-and-conventions-calendar>

When searching by division, remember some states adjacent to GA are in different divisions:

Southeastern: GA, AL, FL Delta: TN Roanoke: NC, SC



GARS Events Calendar for 2022		GARS Recurring Calendar
TechFest Winter Field Day Spring Technician HamCram Dog Show Fundraiser Georgia QSO Party North metro area Fox Hunt Memorial Day Parade ARC/KARC Hamfest Field Day Summer General HamCram JOTA Fall Technician HamCram Maker Faire Stone Mt. Hamfest Holiday Party	Cancelled for 2022 Jan 29-30 2022 March 26-27, 2022 March 30-April 3 2022 April 9-10 2022 April 2022 May 30 2022 June 4 2022 June 26-27 2022 July 30-31 2022 October 16-17 2022 October 29-30 2022 TBD November 5-6 2022 December 3 2022	<ul style="list-style-type: none"> 2nd Tuesday of the month at 7 pm (except December) Monthly Club Meeting 690 Airport Rd, Lawrenceville, GA 30046 3rd Tuesday of the month at 7 pm (except December) Monthly Workshop 690 Airport Rd, Lawrenceville, GA 30046 2nd Sunday of the Month at 2 pm GARS Ham Exam Session 690 Airport Rd Lawrenceville, GA 30046 Every Monday at 7:30 pm: GARS Want, Swap, Sell, and Information Net on the GARS 147.075 MHz repeater Every Monday at 8:30 pm: ARES Training on the GARS 147.075 MHz repeater Most Saturdays at 7:30 am : GARS Weekly Breakfast Cracker Barrel Restaurant 75 Celebration Dr., Suwanee, GA 30024
	GARS CALENDAR FOR September 2022	

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	2	3 Breakfast at Cracker Barrel in Suwanee 7:30 AM
4	5 7:30 – 8:00 PM GARS 2M Net	6 7:00 PM GARS Exec Meeting (Online)	7	8	9	10 Breakfast at Cracker Barrel in Suwanee 7:30 AM
11 GARS VE Exam Session EAA 690 Hangar 2:00 PM	12 7:30 – 8:00 PM GARS 2M Net	13 7:00 PM GARS Meeting EAA 690 Hangar	14	15	16	17 Breakfast at Cracker Barrel in Suwanee 7:30 AM
18	19 7:30 – 8:00 PM GARS 2M Net	20 7:00 PM GARS Workshop EAA 690 Hangar	21	22	23	24 Breakfast at Cracker Barrel in Suwanee 7:30 AM
25	26 7:30 – 8:00 PM GARS 2M Net	27	28	29	30	

Local Ham Radio Exams & Meetings

GARS Ham Radio Exams

Second Sunday of the month

Doors open at 1:45pm, exams start promptly by 2:00pm

GARS VE-Team

VEC: W5YI-VEC

EAA 690 Hangar

690 Airport Rd

Lawrenceville, GA 30046

GARS VE Team Leaders

E-mail: exams@gars.org

August 2022 Results

We had a great exam session today. 2 out of 2 applicants passed!

Exam session results:

- 2 upgraded to General

Special thanks to the Volunteer Examiners who made this exam session possible:

Rick, N4XYY

Richard, KM4SWL

Earl, AF4FG

Bill, WB4WTN

Bob, K4CQO

Frank, KV4SP

Dave, W4DTR (CVE)

Thanks & 73,

Dave Bruse, W4DTR (CVE)

GARS VE Team Leader

GARS VE Website: <http://gars.org/exams> has location information and testing requirements.

Local Ham Radio Exams

In order to find an exam session near you, please visit

http://www.arrl.org/exam_sessions/. Contact the information in the listing for further information.



Local Ham Radio Meetings

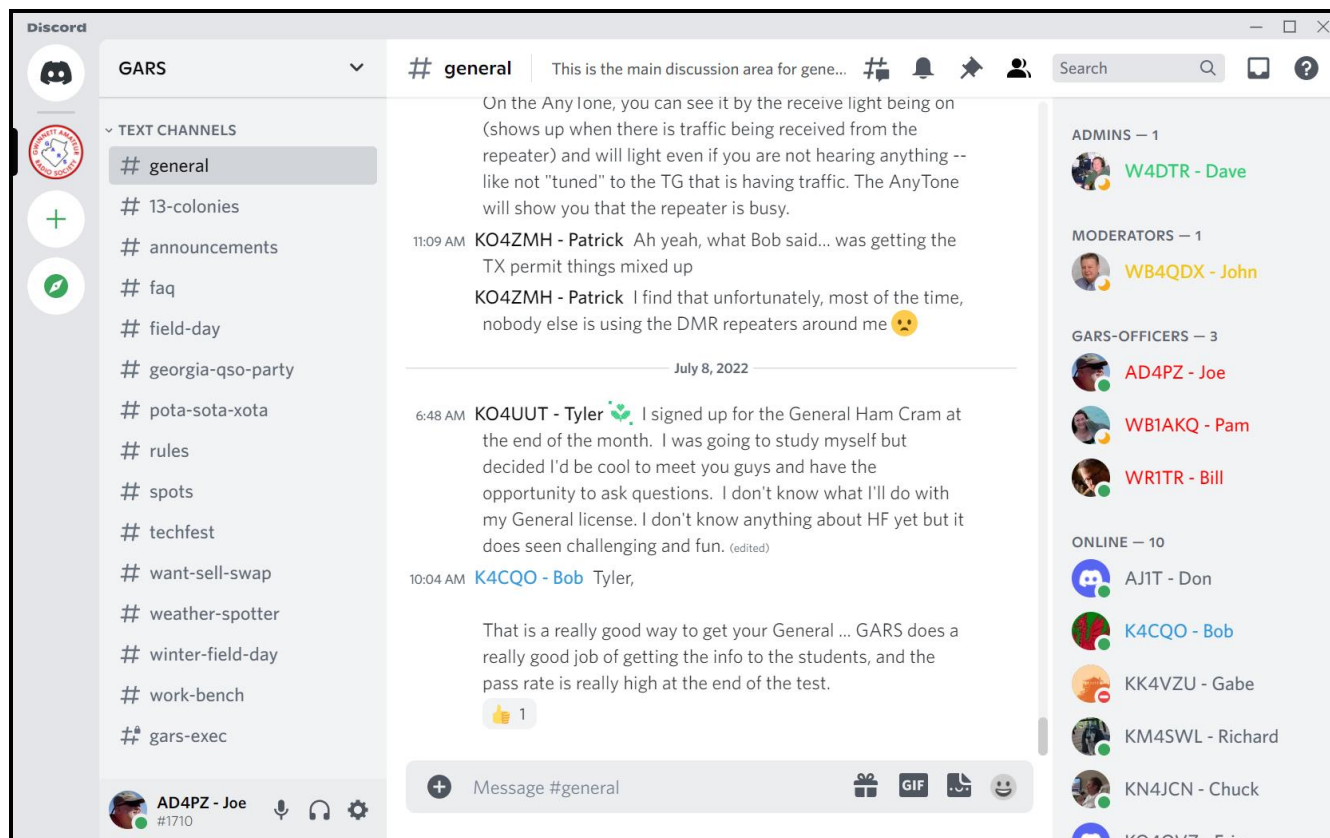
In order to find a local Ham Radio Club meeting near you, please visit

<http://www.arrl.org/find-a-club>. Contact the club for meeting information.



From the Prez:

Don't forget about our Discord utility for GARS announcements, news, activity spotting and more. See <http://www.gars.org> left side menu. Below is a sample of Discord.



General Support Request

HamCation Needs You!!

Michael Cauley, W4ORL, General Chairman



The largest hamfest in the southeast US, 2nd largest in the world needs your help! HamCation is managed and operated by volunteers. Without volunteers, HamCation would not be able to happen each year. It takes hundreds of volunteers each year to help run HamCation and 2023 is no exception.

We need volunteers to help with our Security, Onsite Ticket Sales, Special Event Station, SWAP Table area, Tailgate area, Forums, Hospitality, IT, and even driving our Golf Cart Shuttles. These just to name a few of the areas.

By volunteering for four hours in one day, we will provide you with an admission ticket that is good for all three days of the show. By volunteering at least 8 hours in one day, we will also provide you a meal ticket for lunch or dinner in our Volunteer Lounge.

We don't just need volunteers on the show days, we have opportunities to volunteer as early as the Monday before the show starts. You could even volunteer before the show starts, earn your ticket, and spend the next 3 days at the show.

For more information to include a description of each volunteer position needed and its duties and to sign up go to: www.hamcation.com/hamcation-volunteer Be sure to read the directions as each volunteer needs to submit the form and we asked that only one area is selected each day. If you want to volunteer in more than one area in a day, please submit a form for each position. You will then be contacted by the Chairman of the area you volunteer for to create a schedule based on your availability and our needs.

[Editor Note: HamCation is located at the Central Florida Fairgrounds and Expo Park, Orlando, FL on February 10-12, 2023]



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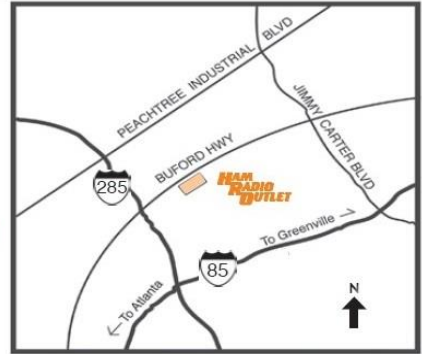
If your closest 800 number is busy, please call one of our other numbers.

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All Stores Open 10am - 5:30pm Monday - Saturday

24-Hour FAX Order Lines at all Store Locations

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FREE ADMISSION



TechFest

Gwinnett Amateur Radio Society

TECH FEST 2023

★ ★ ★ **25TH ANNIVERSARY** ★ ★ ★

SATURDAY, JANUARY 14, 2023

EXHIBITORS: SET UP 7:30AM - 9:00AM

PUBLIC: 9:00AM - 3:00PM

FREE HAM EXAMS: 9:00AM - 11:00AM

FINAL PRIZE DRAWING: 3:00PM

FORUMS - EXHIBITORS

RAFFLE PRIZES - DDDR PRIZES

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WWW.TECHFEST.INFO

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